

**CLAIMS**

1. A metal base circuit substrate for an optical device comprising a metal base substrate made from aluminum or aluminum alloy that supports an electric circuit via an insulation layer, wherein said insulation layer is formed from a transparent cross-linked  
5 silicone body, and said electric circuit is formed directly on said insulation layer.
2. The metal base circuit substrate for an optical device according to Claim 1, wherein said insulation layer has a thickness not exceeding 10  $\mu\text{m}$ .
3. The metal base circuit substrate for an optical device according to Claim 1, wherein a dielectric constant of said cross-linked silicone body does not exceed 4.0.
- 10 4. The metal base circuit substrate for an optical device according to Claim 1, wherein said circuit is formed either by etching a conductive layer formed in said insulation layer by electrolytic or non-electrolytic plating, or by printing said circuit on said insulation layer with the use of an electroconductive ink.
5. A method of manufacturing a metal base circuit substrate for an optical device  
15 comprising the steps of:
  - a) applying a cross-linkable silicone onto the surface of a metal base substrate made from aluminum or aluminum alloy,
  - b) cross-linking said silicone, thereby forming an insulation layer from the transparent cross-linked silicone body; and then
  - 20 c) forming an electric circuit directly on said insulation layer either by (i) forming a conductive layer by electrolytic or non-electrolytic plating with subsequent etching, or (ii) by printing with a conductive ink.